

March 1 2001

Mr. D.J. Lavoy  
U.S. Department of Housing and Urban Development  
Real Estate Assessment Center  
1280 Maryland Ave S.W., Suite 800  
Washington, DC 20024-2181

Re: Report to Congress: REAC Physical Inspection Process Study and Results Dated March 1, 2001

Dear Mr. Lavoy:

The Louis Berger team has been engaged by the Department of Housing and Urban Development (HUD) to review and comment on HUD's report to Congress dated March 1, 2001. To accomplish that review, the Berger team was also asked to :

1. Search for data on acceptable variations in similar systems
2. Review REAC plans for conducting the statistically valid test and make appropriate recommendations for any modifications
3. Validate the conduct of that test
4. Report to HUD on the team's findings

This letter report addresses the requirement to provide the team's review of the HUD report to Congress. The other four items are addressed in a report under separate cover that has been furnished to the Department as required by the Berger contract.

The Berger Team conducted this evaluation in close coordination with HUD to ensure that the information is complete and accurate and that the results are presented in an acceptable fashion. A two-tier approach was taken for the evaluation, an engineering and architectural team observed the re-inspections and resolved any variations from a technical standpoint while a statistical review group reviewed the statistical sample and methodology and analyzed the resulting data for trends, conclusions and recommendations.

The Berger Team has reviewed the REAC Report to Congress and supports the overall process and conclusions in the report. Our analysis revealed similar results and our overall conclusions support REAC's findings. Our specific comments on the report and its findings are discussed in the remainder of this letter.

#### Statistical Sampling and Analysis

We participated in the sample design, reviewed the selection plan and concur with HUD's approach. We also agree that the sample that resulted for both Phase I and Phase II of the study were representative and appropriate to support the conclusions drawn. While Phase I was not totally random it was representative and the team has high confidence in the conclusions drawn from the data. As the report demonstrates, it was representative of the 9-30 cohort of

properties and as such is a valid study group. Phase II was selected in a way to be a statistically valid random sample.

### Conclusions Drawn by HUD

We also agree, in general with the conclusions drawn by HUD in the report. In particular, we agree that the protocol is repeatable and fairly represents the condition of the property. More importantly, we found that the analysis demonstrates that it is possible to establish standards of performance that can be used to measure the acceptability of contract inspections in the future. As part of our contract with HUD, we looked for other inspection systems that could be used as benchmarks for the PASS system; benchmarks that would help establish reasonable differences between inspectors. We found no system that would serve as a good benchmark. However, Phase II of this study does establish an appropriate benchmark level of performance and can be used to continue measurement of the quality of the inspection program. Phase I demonstrates that the contract inspectors can perform comparably to the bench mark, once out of standard inspectors are identified and removed from the program.

We also concur with REAC's conclusion that the Independent Quality Assurance (IQA) methodology is a practical tool for measuring inspector performance. This provides the best assurance that unobserved inspections have met necessary quality standards. For that reason, the IQA is more valuable than the CQA to validate the quality of the overall inspection population. Without that assurance, the validity of scores will always be subject to question.

We agree that the Phase I study identified several "out of standard" inspectors. The Berger Team concluded that this finding, however, points to important system control changes that HUD should address. Our thoughts on this point are discussed in the following section, "Remaining Challenges"

We agree that the REAC's IQA program provides a vehicle for identification and resolution of improper assessments. The technical review program gives the PHA's the opportunity to correct scores; contractor quality control is the other major vehicle for identifying poor inspections. Finally, the IQA program will validate the overall inspection population.

### Remaining Challenges

#### Identification and Elimination of Out of Standard Inspections

While the report recognizes that some inspections and inspectors are out of standard, it should address changes needed to remove out of standard inspections and inspectors from the population. The Phase I study demonstrated that scores that were too high would not be observed without the IQA inspection process. Removal of all out of standard inspections, whether too high or too low, is essential to the long-term credibility of the system. With a more rigorous quality control requirement on the contractor, and with continued QA using the IQA methodology, the inspection results will continue to improve. This, of course, needs to be combined with continuing refinement of the protocol and continuing education of the inspectors.

### Other Issues

#### Analysis at the inspectable item level

This analysis is useful in looking for the root cause of differences between inspectors. However, because of the large number of inspectable items, the statistics for inspectable item agreement tend to make the differences between inspectors look better than the actual differences in scores. A 10 percent difference in inspectable items might translate into a 15 or 20 percent

difference in point scores. Therefore, we would encourage REAC to continue to analyze both scores and inspectable items, recognizing that, ultimately, it is consistent scoring that is desired.

#### Time and other factors

The report acknowledges that “time and other factors” cause differences in the scoring. The team found that time is less significant but that the quality of the training, the quality of the inspector, and the quality control/quality assurance program that identifies out of standard inspections have the greater impact.

Please feel free to contact me if you have any questions or if you require additional information. I can be reached at 202-331-7775 or by email at [bbarksdale@louisberger.com](mailto:bbarksdale@louisberger.com).

Sincerely,  
THE LOUIS BERGER GROUP, INC

George G. Barksdale Jr.  
Program Manager